AMENDMENTS TO THE CLAIMS

Please amend claim 1 as follows:

1. (Currently Amended) A method of forming an isolation layer in a semiconductor device, comprising the steps of:

sequentially forming a ~~tunnel~~ pad oxide film and a pad nitride film on a semiconductor substrate and then forming an aperture through which an isolation region of the semiconductor substrate is exposed;

forming a ~~V-type~~ V-type trench ~~at~~ in the isolation region having a sidewall that extends through the pad nitride and the pad oxide films and a V-shaped bottom portion in the substrate;

forming an insulating film spacer at the sidewall of the pad nitride film and pad oxide film ~~in the~~ that defines an aperture leaving the bottom portion of the V-type trench substantially exposed and intact;

forming an ion implantation layer for accelerating oxidization at the exposed bottom portion of the ~~V-type~~ V-type trench ~~that is exposed through the aperture~~;

forming a first insulating film at the exposed bottom portion ~~V-type~~ V-type trench by means of an oxidization process leaving the insulation spacers substantially exposed;

~~burying~~ filling the aperture ~~on the first insulating film with~~ by depositing a second insulating film on top of the first insulating film; and

removing the pad nitride film and the pad oxide film.

2. (Original) The method as claimed in claim 1, wherein a tilt angle of the V type trench is 25 ~ 45°.

3. (Original) The method as claimed in claim 1, wherein the ion implantation layer is formed by implanting arsenic (As).

4. (Original) The method as claimed in claim 3, wherein arsenic (As) is implanted with energy of 15 ~ 50keV.

5. (Original) The method as claimed in claim 3, wherein the dose of implantation of As is 1E14 ~ 1E16cm^{-2}.

6. (Original) The method as claimed in claim 1, wherein the oxidization process is performed at a temperature of 800 ~ 950°C by setting an oxidization target thickness of 300 ~ 1000Å, whereby the first insulating film is formed in thickness of 1500 ~ 4000Å by means of the ion implantation layer for accelerating oxidization.

7. (Original) The method as claimed in claim 1, wherein the second insulating film is formed using a HDP oxide film and is formed in thickness of 2000 ~ 5000Å.